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CLAIMS

Although preferred embodiment of the present invention has been illustrated in the accompanying Drawings and described in the foregoing Detailed Description, it will be understood that the invention is not limited to the embodiments disclosed, but is capable of numerous modifications, rearrangements, and substitutions without departing from the spirit of the invention as set forth and defined by the following claims.

What is claimed is:

- 1. An event publishing service (EPS) system comprising:
 - (a) one or more event suppliers;
 - (b) one or more event consumers;
 - (c) one or more notification channel means; and
- 5 (d) an event publishing service means;

wherein

- said event consumers obtains said notification channel
 means from said event publishing service means;
- said event suppliers connects to said notification channel means by use of said event publishing service means;
- said event suppliers transport events to said event
 consumers through said notification channel means,
 and;
- said notification channel means are constructed and controlled by said event publishing service means.
 - 2. The event publishing service (EPS) system of Claim 1 wherein said event suppliers and event consumers reside on separate nodes within a computer network.

- 3. The event publishing service (EPS) system of Claim 1 wherein one or more components of said system is implemented within an application programming interface (API).
- 5 4. The event publishing service (EPS) system of Claim 1 wherein said transport occurs over the Internet.
 - 5. The event publishing service (EPS) system of Claim 1 wherein one or more components of said system is implemented on a personal computer (PC).
- 10 6. The event publishing service (EPS) system of Claim 5 wherein said personal computer utilizes a $HP-UX^{M}$ operating environment.
 - 7. The event publishing service (EPS) system of Claim 5 wherein said personal computer utilizes a $LINUX^{M}$ operating environment.
 - 8. The event publishing service (EPS) system of Claim 5 wherein said personal computer utilizes a SOLARIS™ operating environment.
- The event publishing service (EPS) system of Claim 5
 wherein said personal computer utilizes a UNIX™ operating environment.

10. The event publishing service (EPS) system of Claim 5 wherein said personal computer utilizes a Microsoft® Windows™ operating environment.

- 11. An event publishing service (EPS) method comprising:
 - (1) reading a configuration file;
 - (2) building initial channels;
 - (3) registering said channels in a naming service;
- 5 (4) waiting for connection requests;
 - (5) creating additional channels;
 - (6) connecting an EMS to said channels;
 - (7) registering new channels in said naming service and proceeding to step (4).

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said channels are used to transport events from event suppliers to event consumers.

- 12. The event publishing service (EPS) method of Claim 11 wherein said event suppliers and event consumers reside on separate nodes within a computer network.
- 13. The event publishing service (EPS) method of Claim 11 wherein one or more steps of said method is implemented within an application programming interface (API).

- 14. The event publishing service (EPS) method of Claim 11 wherein said transport occurs over the Internet.
- 15. The event publishing service (EPS) method of Claim 11 wherein one or more steps of said method is implemented on a personal computer (PC).
- 16. The event publishing service (EPS) method of Claim 15 wherein said personal computer utilizes a $HP-UX^{TM}$ operating environment.
- 17. The event publishing service (EPS) method of Claim 15 wherein said personal computer utilizes a LINUX $^{\text{\tiny M}}$ operating environment.
- 18. The event publishing service (EPS) method of Claim 15 wherein said personal computer utilizes a SOLARIS™ operating environment.
- 15 19. The event publishing service (EPS) method of Claim 15 wherein said personal computer utilizes a UNIX™ operating environment.
- 20. The event publishing service (EPS) method of Claim 15 wherein said personal computer utilizes a Microsoft®
 20 Windows™ operating environment.

- 21. The event publishing service (EPS) method of Claim 11 wherein said read configuration file step further comprises
 - (1) reading configuration file(s);
- 5 (2) determining the number of channels;
 - (3) determining the event types to be carried by said channels;
 - (4) determining the quality of service properties for said channels;
 - (5) determining said channel names;
 - (6) determining said channel connectivity; and
 - (7) determining if there are more channels, and if so proceeding to step (3).

- The event publishing service (EPS) method of Claim 11 22. wherein said build initial channels step and/or said connect EMS to channels step further comprises
 - obtaining an EventChannelFactory object; (1)
- creating a channel; 5 (2)
 - obtaining SupplierAdmin from said channel; (3)
 - (4) creating a ProxyConsumer;
 - determining if this is a build initial channel (5) request, and if so, returning to the procedure caller;
 - obtaining an EventSupplier from said EMS; and (6)
 - said EventSupplier to (7) connecting said ProxyConsumer to permit said events to be sent through said channel.

- 23. An event publishing service (EPS) encoded propagated signal data stream constructed using
 - (1) one or more event suppliers;
 - (2) one or more event consumers;
- 5 (3) a communications network;
 - (4) encoded event signaling data; and
 - (5) an event publishing service means;

wherein

- said event publishing service means coordinates event transport between said event suppliers and event consumers over said communications network;
- said coordination occurs via encoding of event information from said event suppliers to said event consumers via said communication channel;
- said event publishing service permits event consumers
 to obtain event channels for said communication
 and permits said event suppliers to connect to
 said event channels.

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- 24. A computer usable medium having computer-readable program code means providing event publishing service (EPS) functionality, said computer-readable program means comprising:
- 5 (1) computer program code means for reading a configuration file;
 - (2) computer program code means for building initial channels;
 - (3) computer program code means for registering said channels in a naming service;
 - (4) computer program code means for waiting for connection requests;
 - (5) computer program code means for creating additional channels;
 - (6) computer program code means for connecting an EMS to said channels;
 - (7) computer program code means for registering new channels in said naming service; and
 - (8) computer program code means for proceeding to step(4).

wherein

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said channels are used to transport events from event suppliers to event consumers.

- 25. The computer usable medium of Claim 24 wherein said event suppliers and event consumers reside on separate nodes within a computer network.
- 26. The computer usable medium of Claim 24 wherein one or more steps of said functionality is implemented within an application programming interface (API).
- 27. The computer usable medium of Claim 24 wherein said transport occurs over the Internet.
- 28. The computer usable medium of Claim 24 wherein said medium is compatible with a personal computer (PC).
- 29. The computer usable medium of Claim 28 wherein said personal computer utilizes a $HP-UX^{TM}$ operating environment.
- 30. The computer usable medium of Claim 28 wherein said personal computer utilizes a $LINUX^{M}$ operating environment.
- 31. The computer usable medium of Claim 28 wherein said 20 personal computer utilizes a SOLARIS™ operating environment.

- 32. The computer usable medium of Claim 28 wherein said personal computer utilizes a $UNIX^{\text{\tiny{IM}}}$ operating environment.
- 33. The computer usable medium of Claim 28 wherein said
 5 personal computer utilizes a Microsoft® Windows™
 operating environment.